

Appln No. 09/866,546
Amdt date February 2, 2006
Reply to Office action of November 2, 2005

REMARKS/ARGUMENTS

In the Office action dated November 2, 2005, claims 1, 2, 10, 11, 13, 14, 16, 17, 19, 20 and 25 were rejected under 35 U.S.C. § 102 and claims 12, 18 and 21 - 24 were rejected under 35 U.S.C. § 103. By this Amendment, Applicant has amended claims 1, 2, 10 and 26 and added claims 27 - 32. Reconsideration and reexamination are hereby requested for claims 1, 2, 10 - 14, 16 - 25 and 27 - 32 that are now pending in this application.

Response to the 35 U.S.C. § 102 Rejection of the Claims

Claims 1, 2, 10, 11, 13, 14, 16, 17, 19, 20 and 25 were rejected under 35 U.S.C. § 102(e) as being anticipated by Bonneau, U.S. Patent No. 6,577,229 (hereafter referred to as "Bonneau"). Claims 1 and 2 are independent. The remaining claims depend on either claim 1 or claim 2.

Bonneau describes a system where a "smart card communication device determines a valid smart card communication protocol used by a smart card by polling a communication channel using a plurality of smart card communication protocols." Bonneau, Abstract. To this end, the smart card communication device 104 "generates the initiation message corresponding to the Nth smart card communication protocol" and "the initiation message is transmitted in accordance with the nth smart card communication protocol." Bonneau, column 19, lines 9 - 17 and Figure 2. The smart card communication device 104 then "determines if a valid acknowledgement message in accordance with the nth smart card communication protocol has been received." Bonneau, column 19, lines 27 - 31.

Any acknowledgement message would be generated by a proximate smart card modulating a signal generated by the smart card communication device 104. Here, a given smart card only responds to one specific type of protocol (i.e., the Nth smart card communication protocol mentioned above). Bonneau, column 6, lines 58 - 65 and column 7, lines 37 - 40:

The transceiver 209 in the SCCD 104 establishes the wireless communication channel 110 by creating an electromagnetic field, transmitting information through the electromagnetic field, and receiving information from the smart card 106 by observing

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changes in the electromagnetic field due to modulation by the smart card 106. As mentioned above, other types of transceivers 209 and communication channels 110, however, may be used in alternate embodiments of the invention.

If a smart card 106 using the first smart card communication protocol receives the initiation message and validly responds with the appropriate acknowledgment message, the RF circuit 214 and the DSP 210 demodulate the acknowledgment message and forward the demodulated message to the micro-controller 208. The micro-controller 208 compares the acknowledgment message to a stored message in memory (not shown) corresponding to the first smart card communication protocol. The micro-controller 208 recognizes the acknowledgment message as a valid response to the first smart card communication protocol and reports to the master module 107 that one of the smart card types polled is present.

The above illustrates that Bonneau does not teach or suggest “sequentially scanning . . . for polling messages from a plurality of network masters of a plurality of time-synchronous RF networks” or selecting “a network associated with one of the received polling messages” as claimed in independent claims 1 and 2. The Office action is unclear as to which device in Bonneau is thought to perform the scanning. Applicant submits that neither the smart card communication device 104 nor the smart card 106 performs the claimed scanning.

In Bonneau the smart card communication device 104 performs the polling. It does not scan for polling messages or select a network associated with one of the received polling messages as claimed. Rather, the smart card communication device 104 receives acknowledgement messages.

As discussed above, the smart card 106 passively receives electromagnetic fields then modulates an electromagnetic field associated with the particular smart card communication protocol supported by that smart card. The smart card does not sequentially scan for messages. Moreover, the smart card does not scan for “messages from a plurality of network masters of a plurality of time-synchronous RF networks to determine whether communications may be established with one of the networks.” Again, the smart card simply modulates an electromagnetic field generated by the smart card communication device 104 in response a specific protocol signal.

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Moreover, Bonneau does not teach or suggest that the RF signals generated by the smart card communication device 104 are time-synchronous RF signals. Hence, Bonneau does not teach or suggest “scanning for polling signals from network masters of a plurality of time-synchronous RF networks.”

In view of the above, Applicant respectfully submits that claims 1 and 2 are not obvious in view of the cited art. The claims that depend on claim 1 or claim 2 also are patentable over the cited references for the reasons set forth above. In addition, these dependent claims are patentable over the cited references for the additional limitations that these claims contain.

For example, regarding claims 10 and 16, Bonneau does not teach or suggest that a wireless communication device or a network detector as claimed is configured to “scan a first network during a first scanning window and scan a second network during a second scanning window.”

Regarding claim 13, the passage of Bonneau cited in the Office action makes no mention of multiple scans during each “predetermined wait period” taught by Bonneau. Hence, Bonneau does not teach or suggest “performing multiple scans during the first scanning window and performing multiple scans during the second scanning window” as claimed. Here, Applicant assumes that the Examiner contends that the “predetermined wait period” corresponds to the claimed “scanning window” pursuant to the comments regarding claim 10 in the Office action.

The cited references do not teach or suggest “sequentially scanning” as claimed above that “comprises sequentially using different radio interfaces” as set forth in claim 27.

The cited references do not teach or suggest “sequentially scanning” as claimed above that “comprises sequentially using communication protocols for different RF networks” as set forth in claim 28.

The cited references do not teach or suggest “sequentially scanning” as claimed above that “comprises sequentially using different frequency hopping and modulation rate parameters” as set forth in claim 29.

The cited references do not teach or suggest “sequentially scanning” as claimed above that “comprises sequentially using different baseband processors” as set forth in claim 30.

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The cited references do not teach or suggest "different baseband processors use a common RF radio front end to communication with different RF networks" as set forth in claim 31.

The cited references do not teach or suggest "sequentially scanning" as claimed above that "comprises sequentially scanning for an inquiry sequence and a beacon from an RF network" as set forth in claim 32.

Response to the 35 U.S.C. § 103 Rejection of the Claims

Claims 12 and 18 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Bonneau in view of Operating Systems Internals and Design Principles, 4th ed., by William Stallings (hereafter referred to as "Stallings"). Stallings is directed to the design of an operating system. Accordingly, Stallings in non-analogous art and one skilled in the art would not have been motivated to look to a reference regarding operating system design to solve RF communication problems addressed by the claimed inventions.

Claims 21 - 24 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Bonneau in view of Widegren et al., U.S. Patent No. 6,374,112 (hereafter referred to as "Widegren"). Here, the Office action cites Widegren at column 5, line 63 - column 6, line 21.

Widegren does not teach or suggest "selecting an RF communication based on user preference" as asserted by the Office action. Rather, the cited passage states that the "RAN interface . . . provides services to/from mobile radios . . . without having to request specific radio resources to provide those services. The RAN interface essentially hides those details from the . . . users." Hence, radio service is provided without input from the user.

The cited passage discusses mapping radio access bears onto physical transport layers as follows:

The mapping includes selecting channel parameters based on quality of service parameters that accompany the radio access bearer request. Example parameters include transport and radio channel type (common or dedicated), retransmission protocol (RLC) parameters, selection of encoding and interleaving (MAC and physical layer) parameters,

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selection of radio access bearer multiplexing options, (i.e., which radio access bearers will be multiplexed with each other and at which level), and selection of CDMA code(s) and bit rate(s).

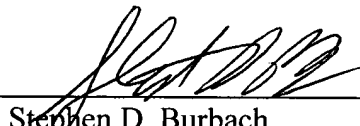
The cited passage makes no mention of bandwidth, much less relative bandwidth as claimed in claim 22. Also, the cited passage only talks in terms of radio parameters, not relative content as claimed in claim 24.

CONCLUSION

For the foregoing reasons Applicant submits that the claims are patentable over the references of record. Reexamination and reconsideration are respectfully requested.

Respectfully submitted,
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